Dynamic Job Gains and Losses in California:

Underlying Economic Change

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Philip A. Hardiman, Manager, Applied Research Unit
Richard Holden, Chief, Labor Market Information Division

Labor Market information Division
Employment Development Department
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Abstract

In this paper, we make the first major effort to study the levels and rates of dynamic **job gains** and dynamic **job losses** in California. Dynamic job gains are defined as the employment growth contributed by employers that expand or start up; dynamic job losses are employment losses by employers that contract or shut down. Our analysis indicates that:

- over a *million jobs* are created each quarter in California, up to and including second quarter of 2001;
- seasonality is an important explanatory variable when examining industry differences;
- California's dynamic job gain and dynamic job loss data are validated by dynamic job gains and losses studies in other regions, in terms of levels and rates, after accounting for geographic, economic, and seasonal differences. Moreover, California's vibrant economy is demonstrated in the high rates of job expansion and contraction, relative to other regions in the U.S.

This study briefly compares California data produced by the Labor Market Information Division to California data published by the U. S. Bureau of Labor Statistics (BLS), to other state and regional data, and to national data produced by BLS. These various studies use differing units of analysis and time frames, but they all corroborate the magnitude of dynamic job gain and loss activity, as compared to net employment change – which is the traditional way of assessing employment trends.

Introduction

Recent studies of labor market dynamics have made use of relatively new concepts in measuring job mobility. While traditional analysis looks at net changes in employment over time, such as did the overall level of employment grow or shrink, this standard approach misses the large volumes of positive and negative job flows that occur at the employer level.

Measures of dynamic job gains and losses provide an indication of the underlying nature of employment level changes.[1] Dynamic job gains are defined as the employment growth contributed by employers that expand or start up; dynamic job losses are employment losses by employers that contract or shut down. The difference between the two measures closely approximates the net change in total employment, but the magnitude of each measure is considerably larger than the net change – by at least a factor of three over the time period studied in this paper. In fact, dynamic job gains are very high even when employment levels are declining!

Method

We developed measures of dynamic job gains and losses using the universe of private employment covered by unemployment insurance. This universe comprises over 98 percent of all private employment. The method used to determine dynamic job gains and losses involved summing the changes in employment by employers, and separating out the number of jobs created from those lost, for each quarter over a three-year (12 quarter) period. The arithmetic difference of dynamic job gains and losses equals the net employment change.[2,3]

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[1] In assessing changes in employment over time, there are three important concepts: 1) net change; 2) gross change at the employer level; and 3) gross change at the employee-employer level. The first concept is the classic or traditional way of assessing employment change. The second concept is the one we are dealing with in this paper – gross change at the employer level, as explained further in footnote 2 below. The third concept is "turnover" measured as hiring and separating activity at the employer level for each employee in a given quarter, as used by the United States Bureau of Labor Statistics (BLS) in the new Job Openings and Labor Turnover Survey (JOLTS).

[2] The universe employment data are administratively known as the ES-202 file, which is developed by California under the direction of the BLS. The dynamic job gains and job losses figures are computed by subtracting third month employment in the prior quarter from the third month of the current quarter. If the difference is greater than or equal to zero, then job expansion is set to the difference, and job contraction is set to zero; conversely, if the difference is less than zero. The ES-202 data file also supports an establishment basis for computing job flows. Establishment based figures are roughly 10% higher than employer based figures in fourth quarter of 2001, the only quarter for which a comparison has been completed. In this paper, the employer is a statewide entity and may have numerous establishments in various parts of the state in different industries. Furthermore, no adjustments have been made in the data for predecessor/successor relationships, for firm births and deaths, or for switches between single

Overall Dynamic Job Gains and Losses

As shown in Chart 1, dynamic job gains and losses are seasonal events. Dynamic job loss swings in California greatly exceed the seasonal movements in dynamic job gains. Dynamic job gains have stayed above 900,000 for all 12 quarters in the period studied (first quarter of 1999 through fourth quarter of 2001), although generally trending downward as the economy has slowed. In fact, total dynamic job gains for private industry dipped below one million for the first time in the third quarter of 2001. The drop in third quarter may reflect the weakness in the economy and, to a small degree, the effects of September 11th.

Dynamic job losses, conversely, seem to have been trending upward as the economy has slowed. Over the 12 quarters of data in Chart 1, the last two quarters of 2001 demonstrate the effects of the current slowdown. In each of these two quarters, there are at least 160,000 more jobs lost than gained. In prior year third quarters, dynamic job gains exceeded losses; in the prior fourth quarter, there were only about 30,000 more jobs lost than gained.

Appendix Tables A.1 and A.2 provide quarterly levels of dynamic job gains and dynamic job losses for major industries and select industry groups for the three-year period.

Different Levels in Industries: Agriculture, Services and Trade Vary Widely

Dynamic job gains and losses levels vary by industry and time of year. As shown in Charts 2 and 3, agriculture and manufacturing job gains fall in the fourth quarters, while retail trade job gains rise, reflecting the effects of cooler weather on agriculture and the holiday season on retail trade. Services; finance, insurance, and real estate (FIRE); and manufacturing generally have peak levels of dynamic job gains in the first quarter. While both services and agriculture have swings of dynamic job gains that range more than 100,000 jobs over the year, the change in agriculture is more pronounced relatively because of its smaller total employment levels.

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and multi-establishment status. In all methods used to compute job expansion (JE) and job contraction (JC), the following arithmetic identity is maintained:

Net Employment Change = JE minus JC

[3] This method did not use recent techniques developed by the U.S. Bureau of Labor Statistics (BLS) to account for business consolidations and breakouts in the data as they are linked across quarters. Our analysis of these two methods for California data shows small differences in rates, with a few exceptions.

In Charts 4 and 5, dynamic job losses by industry are greatest in the fourth quarter for agriculture and in the fourth and first quarters for manufacturing. Dynamic job losses in services, retail and wholesale trade, FIRE, transportation, communications and public utilities, and manufacturing all generally peak in the first quarter.

Two industries that stand out are manufacturing and services, both of which are experiencing declining levels of dynamic job gains and an increasing trend in dynamic job losses. Over this three-year period, quarterly job gains in manufacturing fell from over 117,000 jobs created per quarter in 1999 to less than 90,000 jobs in each of the last three quarters of 2001. At the same time, job losses in manufacturing rose from nearly 123,000 jobs lost per quarter in 1999 to almost 141,000 per quarter in 2001. In eight out of the 12 quarters, more jobs were lost than created in manufacturing. In services, most of the job losses occurred in 2001 when jobs lost exceeded jobs created in all quarters.

Rates of Gains and Losses Vary: Agriculture Most Volatile

The levels of dynamic job gains and losses are important because they provide the absolute range of these events. However, rates of dynamic job gains and losses provide a measure of the relative volatility of industries over time. As shown in Charts 6 and 7, the rates[4] of dynamic job gains and losses vary by industry and by season. These rates are computed as a ratio of gains and losses to average quarterly employment. Agriculture is by far the most volatile industry in both job gain and loss rates, with gains ranging from 12 to 42 percent and losses ranging from nine to 45 percent. Construction and retail trade vary widely relative to other non-agricultural industries, but range in each case only about five to seven percentage points, respectively.

Over the period depicted in these charts, the rates of dynamic job gains and losses within industries are roughly equal when compared over a year. The effects of the economic slowdown are shown in decreasing rates of job gains and the increasing pace of losses.

National and State Comparisons

California job gains and losses absolute ranges and rates are useful in portraying the underlying level of economic change that firms and industries undergo over the course of a year and in this three-year window. But, the question arises: How is California different from the rest of the country and other states? Is California more volatile in dynamic job gains and losses, owing to its

[4] In this paper, the rates are computed in ratio to corresponding employment in the Current Employment Statistics data series. In California, this series can be found at: www.calmis.ca.gov.

entrepreneurial business culture that seeds new businesses and industries based on innovation, technology, and a wealth of human capital? Comparisons with the U. S. and other states would be instructive. Unfortunately, very little comparable data have been produced. We reviewed and compared results from four studies that contain dynamic job gains and losses statistics for California, the U. S., Vermont, the Washington-Baltimore metropolitan area, and metropolitan areas in the Rust Belt states of Michigan, Ohio, and Pennsylvania.[5] Although these studies use varying methods for computing dynamic job gains and losses, they do all essentially corroborate the order of magnitude at which dynamic job gains and losses occur, and help put the California data in a broader perspective.

The first study published by the BLS in May 2001 produced initial national statistics, but only for the fourth quarter of 1999 (see Table 1). The overall dynamic job gains rate of 8.3 percent is very similar to the California rate of 8.5 percent. Similarly, dynamic job losses for the U. S. was 7.4 percent, while California's rate was 8.1 percent. Except for mining, where there is a slight difference between national and California rates, the major industry divisions show roughly the same magnitude and relationships in dynamic job gains and losses rates.[6]

Table 1
Comparison of Quarterly Job Gains and Losses Rates (%)
California and U.S., Fourth Quarter, 1999

	Job Gains	Job Losses
California	8.5	8.1
United States	8.3	7.4

[5] A fifth study by Census Bureau researchers Davis, Haltiwanger and Schuh (*Job Creation and Destruction*, MIT Press, 1996) was reviewed but not compared because the data from the period studied (1973 – 1988) were too different from the data in our analysis. Moreover, the study focused on manufacturing in the U.S. Nonetheless, the quarterly manufacturing job gains and loses rates of 5.2 percent and 5.5 percent, respectively, are not widely dissimilar from the 1999-2001 estimates prepared for manufacturing in California which range from 3.9 to 6.7 percent for job expansion and 5.0 to 8.3 percent for job contraction.

A sixth study by BLS researchers (August 13, 2002 paper presented at the American Statistical Association meeting) was reviewed but not compared because the methods and data were too different from those used in our analysis.

[6] National rates were originally published in the April 2001 *Monthly Labor Review*. California rates are shown in Charts 6 and 7.

The second study, conducted by the Vermont Department of Employment and Training in 2001 produced annual dynamic job gains and losses data[7] for Calendar Year 2000. Obviously, Vermont is very different from California in size, industry structure, and seasons – all factors that potentially influence job gains and losses. Corresponding Vermont data are shown in Table 2, alongside California data; however, evaluating the comparative data is problematic, because the California employment *growth* in 2000 exceeded the total *level* of employment in Vermont. When annual rates of dynamic job gains and losses are calculated, California rates of both are higher than Vermont's for all industry divisions. The largest gaps in dynamic job gains were in services and construction while the largest gaps in job losses were in services and agriculture. Therefore, during 2000 at least, California industries were more volatile than Vermont's.

Table 2
Comparison of Annual Job Gains and Losses Rates (%)
California and Vermont, 2000

SIC	CA Job Gains	VT Job Gains	CA-VT JG Differences		CA Job Losses	VT Job Losses	CA-VT JL Differences
Ag, Forestry and Fisheries	20	12	8		21	11	10
Mining	15	7	8		8	7	0
Construction	25	17	8		17	15	2
Manufacturing	14	9	5		13	8	5
Transportation Communication and Utilities	16	9	7		12	9	3
Wholesale Trade	15	10	5		14	9	5
Retail Trade	14	11	3		11	11	0
Finance, Insurance and Real Estate	14	11	4		14	11	3
Services	20	11	10		16	8	8
Non-classified	175	n/a	n/a		55	n/a	n/a
Total, Private	18	11	7		14	9	5

[7] The Vermont data can be found at www.vtlmi.info. Employment change is measured from first quarter to first quarter. These data represent annual change, as opposed to quarterly change.

The third study, published by the BLS in September 2001, evaluated dynamic job gains and losses in the Washington D.C. and Baltimore metropolitan areas. This study assessed the job flow rates in these areas to see whether these rates differed between central cities and the suburbs. In both cases, the suburban employment levels predominated the results since they represented at least 70 percent of total employment for each of the areas. This study calculated these quarterly job flows over a seven-year period from 1992 to 1999, but did not provide industry-level detail.

The Washington, D. C. and Baltimore areas had overall rates that were similar to California's quarterly average in 1999. As shown in Table 3, the suburban private job gains rates for Washington, D. C., and Baltimore were 8.3 and 8.0 percent, respectively, while California's 1999 rate was 8.8 percent. The job losses rates were 7.4 and 7.3 percent compared to California's 1999 rate of 8.1 percent. These rates were overall less than California's, but they covered a different and longer period, which could account for some of the difference due to a smoothing of year-to-year effects.

Table 3
Comparison of Average Quarterly Job Gains and Losses Rates (%)
California (1999) and Washington, D.C./ Baltimore (1992-99)

	Job Gains	Job Losses
California	8.8	8.1
Washington, D.C.		
Central City	7.2	7.2
Suburban	8.3	7.4
Baltimore		
Central City	6.0	6.3
Suburban	8.0	7.3

The fourth and final study, prepared by BLS in April 2002, compared dynamic job gains and losses rates for labor markets in the Rust Belt states of Michigan, Ohio and Pennsylvania over the period from 1992 through 2000. The 35 Primary Metropolitan Statistical Areas studied have average quarterly job gains rates ranging from 6.2 percent to 7.9 percent and job losses rates ranging from 5.7 percent to 7.7 percent, over that nine-year period. These data confirm the

magnitude of rates we see in California as well as the relative position of California's job gains and losses rates compared to other regions.[8]

Table 4
Comparison of Quarterly Job Gains and Losses Rates (%)
California (1999-2001) and Rust Belt Metropolitan Areas (1992-2000)

	Job Gains	Job Losses
California	8.5	8.3
Rust Belt Metropolitan Areas	7.2	6.7

In conclusion, other studies of dynamic job gains and losses validate the overall rates calculated in California, varying slightly depending on the size and scope of the study. To the extent that the data comparisons are qualified based on the varying time periods and methods used, California's dynamic job gains and losses rates are greater than U.S. rates and those found in the areas covered in the three other studies reviewed—Vermont; Washington, D.C. and Baltimore; and Rust Belt metropolitan areas in Michigan, Ohio, and Pennsylvania. Since California is an entrepreneurial economic cauldron, high rates of dynamic job gains and losses are evidence of the process of creative destruction whereby new firms compete with each other and with older firms.

Summary and Implications

The economic change represented by traditional measures of net employment growth or shrinkage mask the dynamic and dramatic shifts in job gains and losses that are occurring within industries and over time. Thus, even in periods of economic retrenchment, jobs are being created, and in periods of economic growth, jobs are being lost. The labor market can be compared to a large water vessel in which water flows in (jobs created) and leaks out (jobs lost) affecting the overall level of the liquid in the tank (the employment level). The level of jobs is an important measure of the economy's capacity, but jobs created and lost are a measure of both its vitality and volatility.

[8] This result is based on a recent study by Jason Faberman, Office of Employment and Unemployment Statistics, BLS entitled "Job flows and labor dynamics in the U.S. Rust Belt," by R. Jason Faberman, *Monthly Labor Review*, September 2002.

Based on this analysis, the employment fluctuation in agriculture greatly exceeds the variations in other seasonal industries. Consequently, areas of the state that contain high levels of agricultural employment have economies that are subject to these dramatic swings. While these swings are extreme, the employment level of agriculture has changed little over the three years, 1999-2001. We also note that retail trade has a complementary cycle to agriculture in that the peak quarter for job losses in agriculture corresponds with the peak quarter in job gains in retail sales. These phase differences occur across the industrial spectrum, and may, in certain circumstances, provide opportunities for responding to labor supply problems.

Meanwhile, over the past three years, manufacturing has declined in the U.S. and California. The declining fortune of manufacturers is reflected in both the large number of jobs shed and the smaller number of jobs overall. In a dynamic economy, job losses can be considered a natural part of the business life cycle.

The nature of California's entrepreneurial economy creates opportunities for business development and job expansion and, for the most part, job expansion processes usually overwhelm the effects of job losses. Firms start up, grow, and succeed or fail based on their business skills, their ability to penetrate markets, extant economic conditions, and sheer luck. The economy and labor market therefore have an organic nature, growing under suitable conditions and retrenching under difficulty. Regardless of the growing conditions, however, firms and industries create and destroy jobs. Vibrant economies provide a nurturing environment for business expansion. At the same time, new and expanding firms increase the competitive atmosphere which leads to growing job losses, as new and expanding firms push out less competitive new and existing businesses. California's rates of dynamic job gains and losses suggest that our economy is more vibrant than the U.S. economy or the other regional economies reviewed as part of this study.

Chart 1: Dynamic Job Gains and Losses
California, Private Industry
1st Quarter 1999 through 4th Quarter 2001

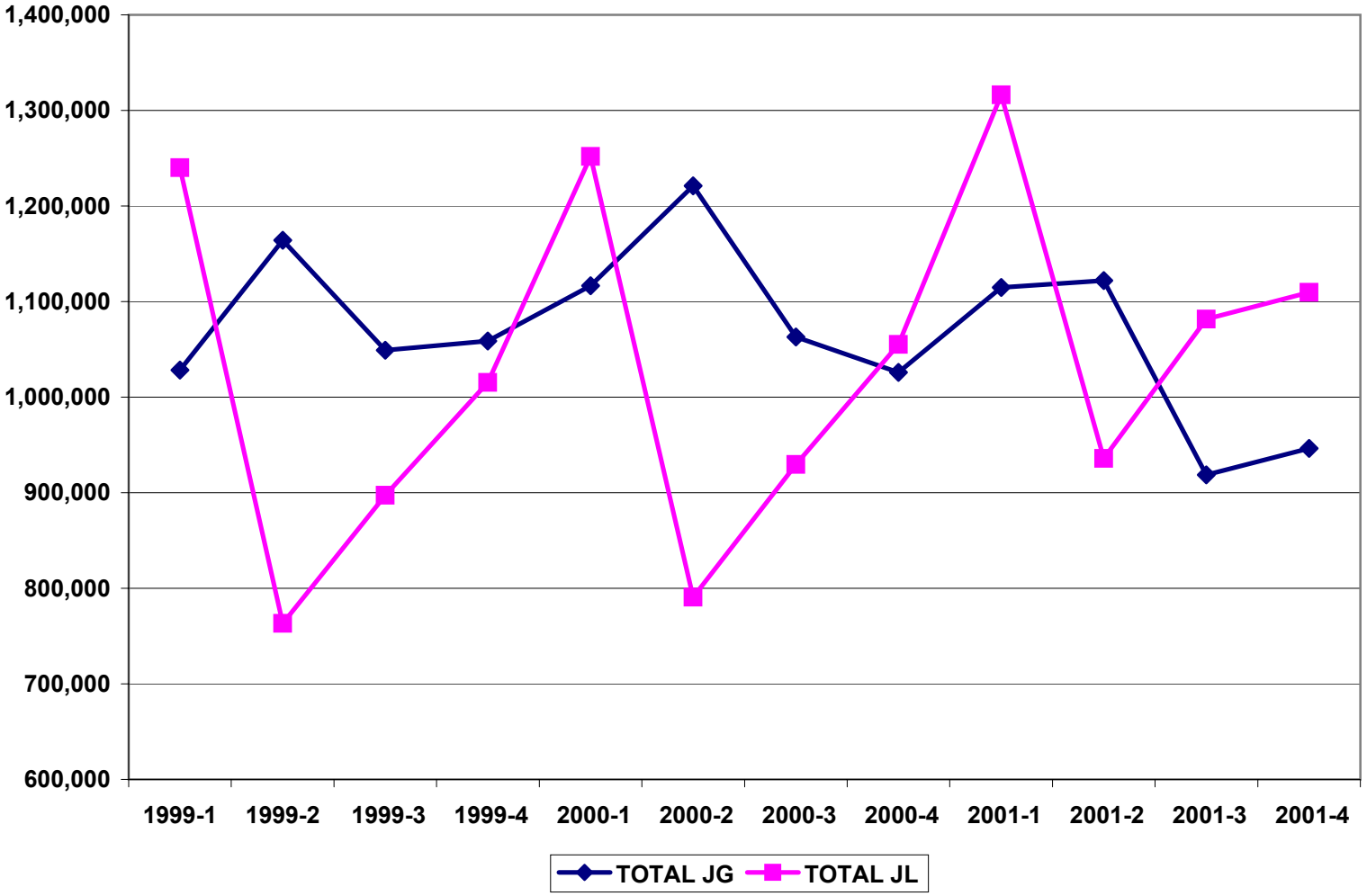


Chart 2: Dynamic Job Gains
California Private Industry
1st Quarter 1999 through 4th Quarter 2001

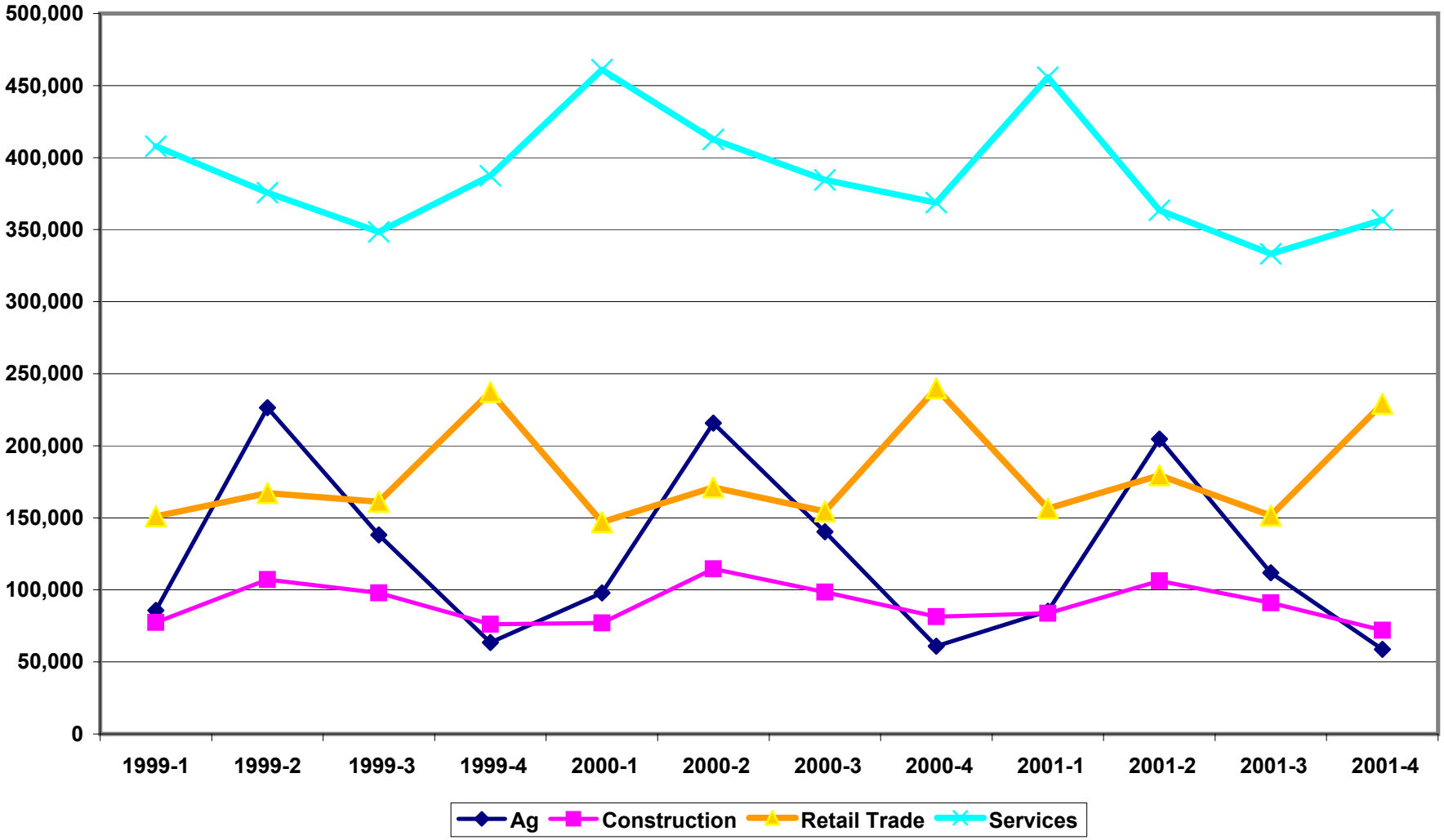


Chart 3: Dynamic Job Gains
California Private Industry
1st Quarter 1999 through 4th Quarter 2001

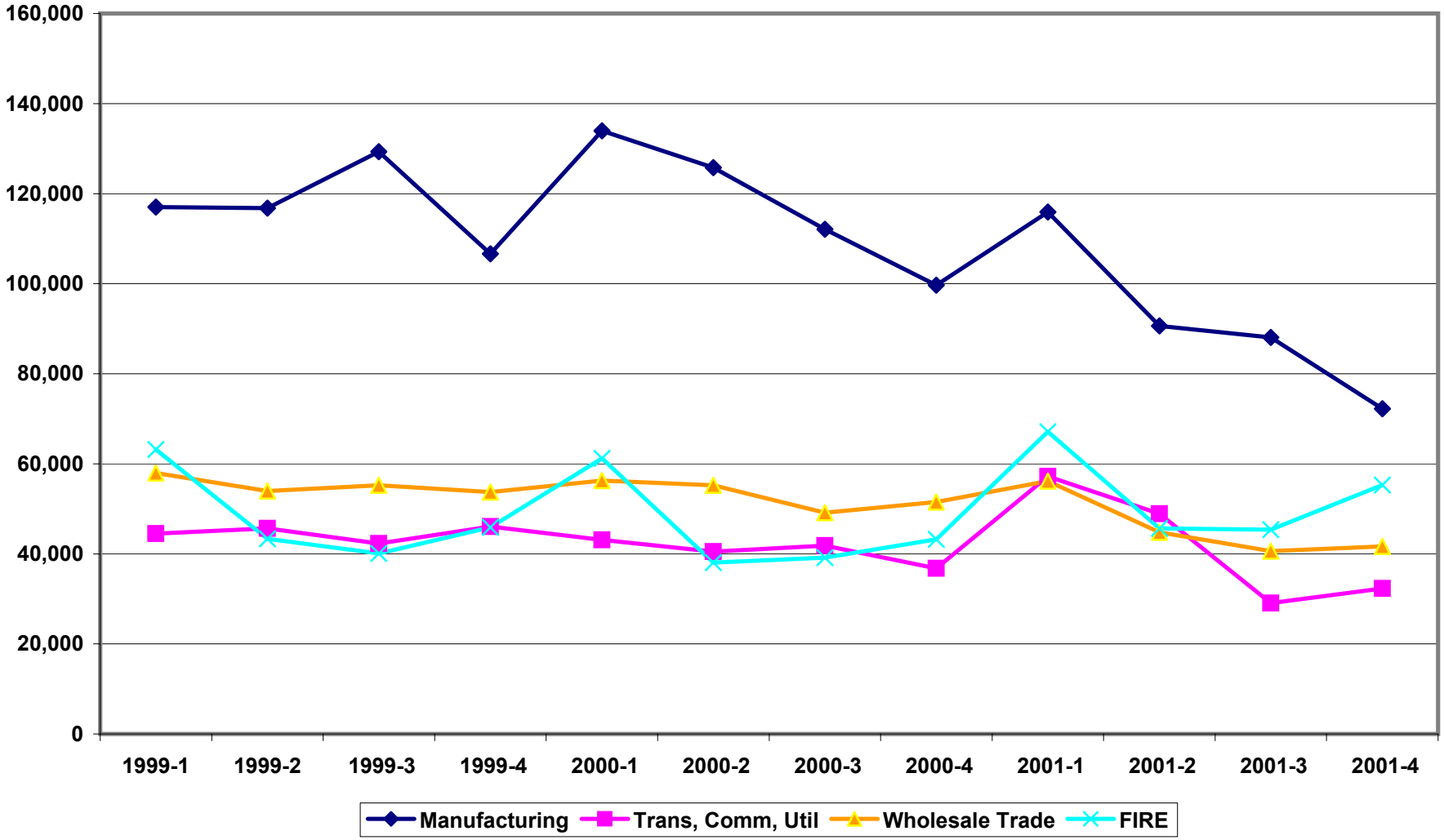


Chart 4: Dynamic Job Losses
California Private Industries
1st Quarter 1999 through 4th Quarter 2001

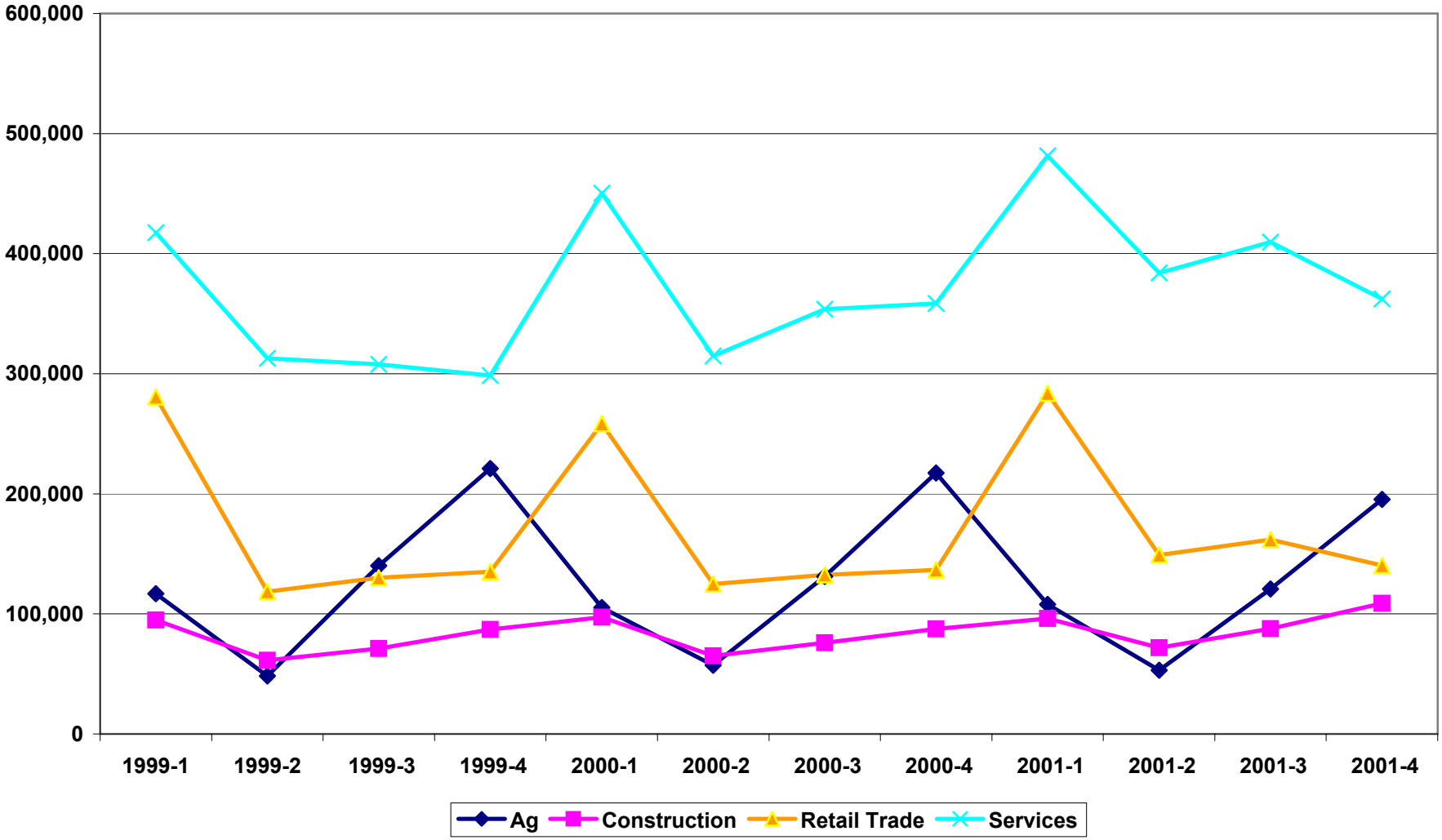


Chart 5: Dynamic Job Losses
California Private Industry
1st Quarter 1999 through 4th Quarter 2001

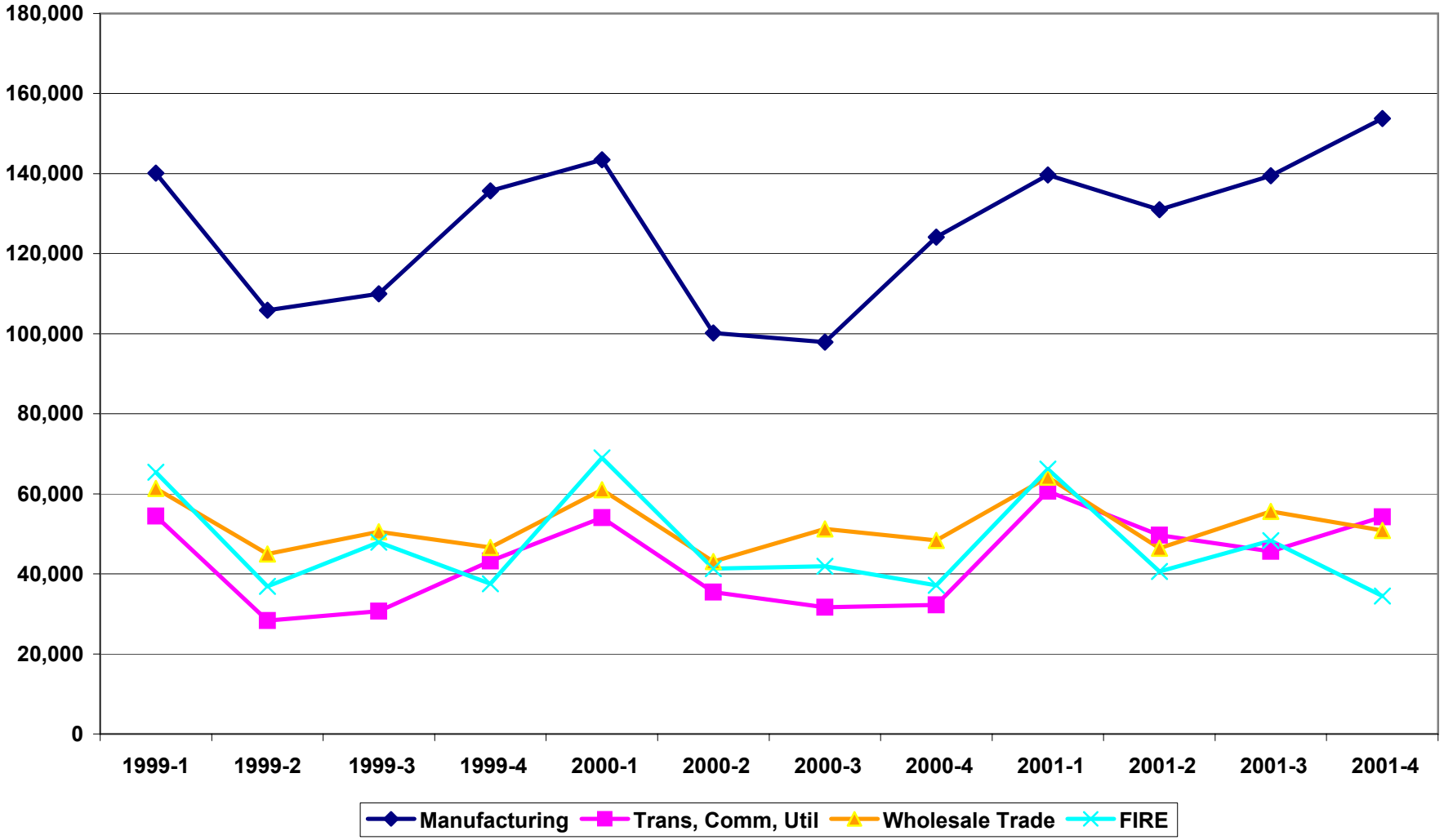
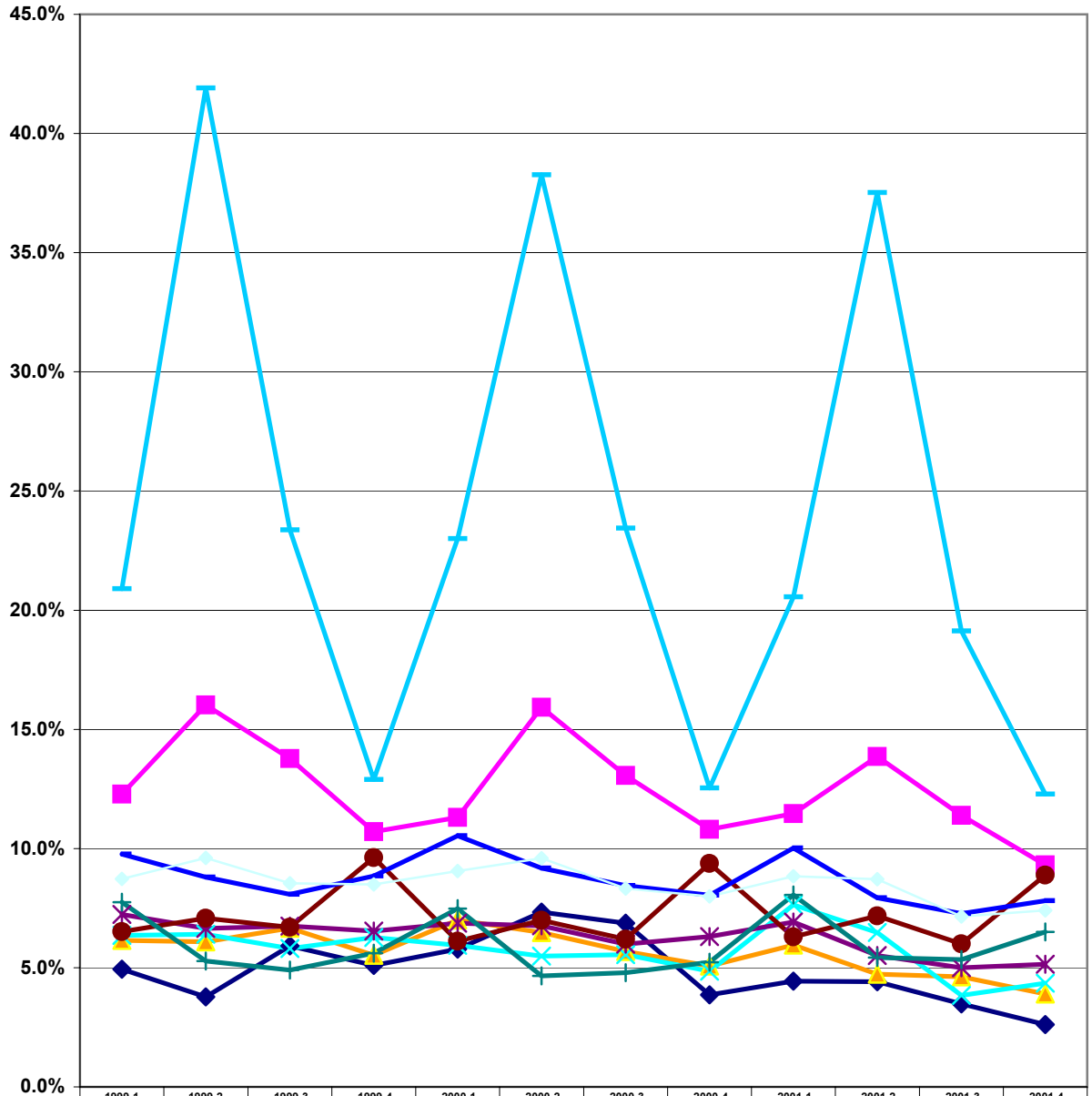


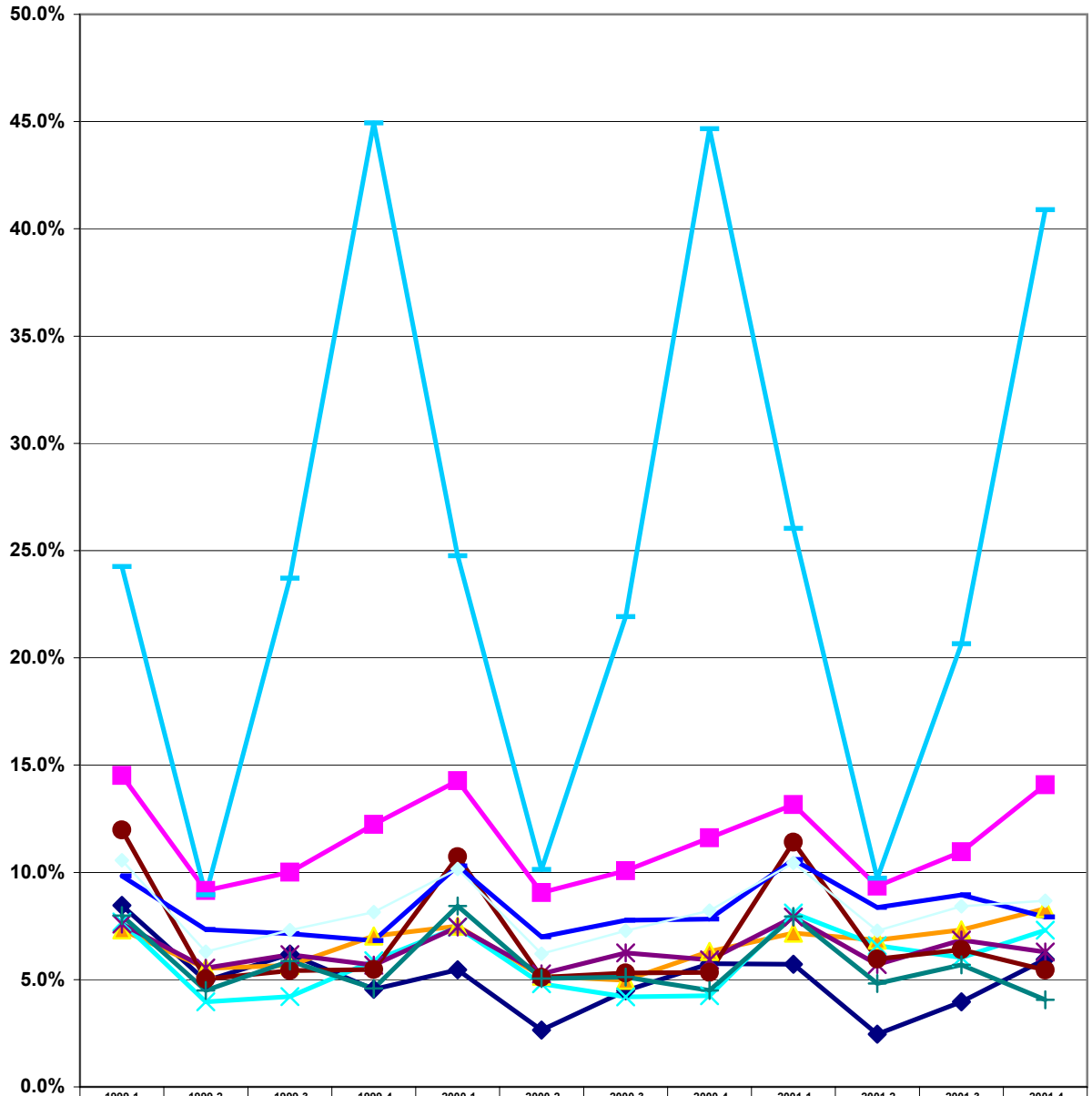
Chart 6: Dynamic Job Gain Rates
California Private Industry
1st Quarter 1999 through 4th Quarter 2001



	1999-1	1999-2	1999-3	1999-4	2000-1	2000-2	2000-3	2000-4	2001-1	2001-2	2001-3	2001-4
Mining	4.9%	3.8%	5.9%	5.1%	5.8%	7.3%	6.9%	3.9%	4.4%	4.4%	3.5%	2.6%
Construction	12.3%	16.0%	13.8%	10.7%	11.3%	15.9%	13.1%	10.8%	11.5%	13.9%	11.4%	9.3%
Manufacturing	6.1%	6.1%	6.7%	5.5%	7.0%	6.5%	5.7%	5.1%	6.0%	4.7%	4.6%	3.9%
Trans, Comm, Util	6.4%	6.4%	5.8%	6.3%	5.9%	5.5%	5.6%	4.9%	7.6%	6.5%	3.8%	4.4%
Wholesale Trade	7.2%	6.6%	6.7%	6.5%	6.9%	6.8%	6.0%	6.3%	6.9%	5.5%	5.0%	5.1%
Retail Trade	6.5%	7.1%	6.7%	9.6%	6.1%	7.0%	6.2%	9.4%	6.3%	7.2%	6.0%	8.9%
FIRE	7.7%	5.3%	4.9%	5.6%	7.5%	4.7%	4.8%	5.2%	8.1%	5.4%	5.3%	6.5%
Services	9.8%	8.8%	8.1%	8.9%	10.5%	9.2%	8.4%	8.0%	10.0%	7.9%	7.3%	7.8%
Ag	20.9%	41.9%	23.4%	12.9%	23.0%	38.3%	23.4%	12.5%	20.6%	37.5%	19.1%	12.3%
Total	8.7%	9.6%	8.5%	8.5%	9.1%	9.6%	8.3%	8.0%	8.8%	8.7%	7.2%	7.4%

Mining Construction Manufacturing Trans, Comm, Util Wholesale Trade Retail Trade FIRE Services Ag Total

Chart 7: Dynamic Job Loss Rates
California Private Industry
1st Quarter 1999 through 4th Quarter 2001



	1999-1	1999-2	1999-3	1999-4	2000-1	2000-2	2000-3	2000-4	2001-1	2001-2	2001-3	2001-4
Mining	8.5%	4.9%	6.2%	4.6%	5.5%	2.7%	4.5%	5.7%	5.7%	2.5%	4.0%	5.9%
Construction	14.5%	9.2%	10.0%	12.2%	14.3%	9.1%	10.1%	11.6%	13.2%	9.4%	11.0%	14.1%
Manufacturing	7.3%	5.5%	5.7%	7.0%	7.5%	5.2%	5.0%	6.3%	7.2%	6.8%	7.3%	8.3%
Trans, Comm, Util	7.7%	4.0%	4.2%	5.9%	7.4%	4.8%	4.2%	4.3%	8.1%	6.6%	6.0%	7.3%
Wholesale Trade	7.6%	5.5%	6.2%	5.7%	7.4%	5.3%	6.2%	5.9%	7.9%	5.7%	6.8%	6.3%
Retail Trade	12.0%	5.0%	5.4%	5.5%	10.7%	5.1%	5.3%	5.3%	11.4%	6.0%	6.4%	5.4%
FIRE	8.0%	4.5%	5.9%	4.6%	8.4%	5.1%	5.1%	4.5%	7.9%	4.8%	5.7%	4.1%
Services	9.8%	7.3%	7.1%	6.8%	10.3%	7.0%	7.8%	7.8%	10.6%	8.4%	8.9%	7.9%
Ag	24.3%	8.9%	23.7%	44.9%	24.8%	10.1%	21.9%	44.7%	26.0%	9.7%	20.6%	40.9%
Total	10.6%	6.3%	7.3%	8.1%	10.2%	6.2%	7.3%	8.2%	10.4%	7.3%	8.4%	8.7%

Mining Construction Manufacturing Trans, Comm, Util Wholesale Trade Retail Trade FIRE Services Ag Total

Appendix Table A.1
Dynamic Job Gains
California: Private Industry

Quarter	1999/1	1999/2	1999/3	1999/4	2000/1	2000/2	2000/3	2000/4	2001/1	2001/2	2001/3	2001/4	% Change from 2000/4 to 2001/4
Agriculture, Forestry & Fishing	85,808	226,474	138,164	63,392	97,816	215,739	140,361	60,997	85,231	204,752	111,800	58,711	-3.7%
Mining	1,176	892	1,380	1,176	1,312	1,717	1,645	917	1,048	1,064	850	631	-31.2%
Construction	77,444	107,226	97,978	76,168	77,081	114,544	98,442	81,353	83,726	106,279	91,081	71,981	-11.5%
Manufacturing	117,037	116,801	129,287	106,628	133,964	125,784	112,091	99,663	115,923	90,632	88,057	72,201	-27.6%
Transportation, Communications and Utilities	44,490	45,652	42,282	46,055	43,126	40,489	41,841	36,769	57,175	48,891	29,052	32,318	-12.1%
Communications	15,100	8,515	11,557	10,497	19,851	10,774	10,979	9,351	26,473	17,198	5,649	8,473	-9.4%
Electric, gas, and sanitary services	4,793	3,078	2,279	1,437	2,175	1,832	3,175	1,556	2,329	1,880	1,769	1,859	19.5%
Wholesale Trade	57,977	53,953	55,209	53,698	56,300	55,241	49,126	51,487	56,131	44,791	40,592	41,673	-19.1%
Retail Trade	151,073	167,131	161,098	237,247	147,036	171,145	154,459	239,873	156,498	179,493	151,536	229,166	-4.5%
Building Materials, etc	4,146	8,285	3,503	4,746	3,861	7,205	2,714	4,102	6,726	7,748	3,727	4,775	16.4%
General Merchandise Stores	2,146	5,501	9,215	47,206	904	8,368	7,031	53,333	710	30,847	16,989	43,466	-18.5%
Food Stores	12,040	15,424	25,148	22,763	14,208	14,869	15,058	21,107	12,452	12,922	17,516	21,124	0.1%
Auto Dealers and Gas Stations	15,049	14,921	14,276	12,179	17,600	15,561	14,873	11,641	15,982	16,030	12,764	12,345	6.0%
Apparel and Accessory Stores	6,284	12,728	11,573	23,806	8,228	11,001	9,905	26,321	7,573	8,775	7,304	27,497	4.5%
Home Furniture Stores	17,111	12,482	12,259	18,740	12,357	12,642	10,980	19,952	12,439	8,220	8,143	18,819	-5.7%
Eating and Drinking Places	72,375	77,307	60,506	62,374	66,844	78,384	68,829	57,947	82,238	75,241	61,381	62,576	8.0%
Miscellaneous Retail	21,922	20,483	24,618	45,433	23,034	23,115	25,069	45,470	18,378	19,710	23,712	38,564	-15.2%
Finance, Insurance and Real Estate	63,160	43,318	40,066	45,860	61,185	38,037	39,180	43,225	67,103	45,649	45,369	55,259	27.8%
Depository Institutions	9,529	3,776	3,670	6,586	11,802	3,386	3,936	4,300	5,479	6,472	9,414	13,841	221.9%
Real Estate	18,191	16,826	13,926	14,417	14,173	14,355	12,427	14,050	15,524	14,676	14,288	16,157	15.0%
Services	407,815	375,647	348,469	387,445	461,012	412,549	384,429	368,659	455,815	363,575	333,155	356,853	-3.2%
Business Services	144,366	124,476	117,441	119,470	196,816	158,768	138,912	110,351	166,492	109,509	93,920	84,438	-23.5%
Health Services	52,089	48,905	42,807	44,548	48,547	45,789	47,824	44,420	55,686	42,045	54,853	55,853	25.7%
Social Services	20,909	21,347	20,263	19,680	20,093	18,961	19,386	20,802	21,041	20,494	21,518	22,431	7.8%
Private Households	19,646	18,310	16,789	45,372	20,141	13,305	24,208	23,016	27,371	26,758	26,820	29,620	28.7%
Nonclassified	22,406	26,920	35,199	40,946	37,750	45,849	41,450	43,031	36,143	37,012	27,193	27,653	-35.7%
Total, Private	1,028,386	1,164,014	1,049,132	1,058,615	1,116,582	1,221,094	1,063,024	1,025,974	1,114,793	1,122,138	918,685	946,446	-7.8%

Appendix Table A.2
Dynamic Job Losses
California: Private Industry

Quarter	1999/1	1999/2	1999/3	1999/4	2000/1	2000/2	2000/3	2000/4	2001/1	2001/2	2001/3	2001/4	% Change from 2000/4 to 2001/4
Ag, Forestry & Fishing	116,735	48,324	140,173	221,005	105,294	57,130	131,223	217,260	107,953	53,045	120,704	195,323	-10.1%
Mining	2,002	1,168	1,446	1,052	1,239	621	1,074	1,364	1,350	593	966	1,432	5.0%
Construction	94,915	61,315	71,191	87,032	97,304	65,125	75,840	87,509	96,105	71,737	87,681	108,846	24.4%
Manufacturing	140,098	105,860	109,970	135,711	143,431	100,151	97,925	124,129	139,679	130,999	139,486	153,751	23.9%
Transportation, Communications and Utilities	54,444	28,319	30,687	43,226	54,058	35,456	31,656	32,232	60,634	49,634	45,629	54,223	68.2%
Communications	13,043	6,124	6,793	10,537	16,280	11,056	8,820	5,724	17,201	22,233	12,957	13,537	136.5%
Electric, gas, and sanitary services	5,555	3,445	1,891	2,053	2,365	1,829	1,764	2,238	2,186	1,868	2,496	1,308	-41.6%
Wholesale Trade	61,350	44,947	50,503	46,604	61,029	43,100	51,218	48,347	64,184	46,399	55,603	50,840	5.2%
Retail Trade	280,586	118,617	130,192	134,997	258,366	124,904	132,461	136,550	283,625	149,089	161,766	140,366	2.8%
Building Materials, etc	4,401	1,932	3,702	3,945	4,797	2,273	3,809	3,559	5,539	1,991	4,795	4,993	40.3%
General Merchandise Stores	65,245	5,796	1,821	2,205	52,033	4,206	2,676	523	59,805	27,975	16,049	742	41.9%
Food Stores	21,167	14,001	14,233	17,286	27,085	17,176	13,089	12,874	19,000	11,420	13,881	12,836	-0.3%
Auto Dealers and Gas Stations	13,679	10,676	12,720	13,847	16,630	11,342	12,623	15,271	17,338	11,154	12,984	15,869	3.9%
Apparel and Accessory Stores	26,823	5,406	7,170	5,879	27,039	6,530	7,380	5,134	30,367	6,505	8,348	6,932	35.0%
Home Furniture Stores	22,678	9,262	10,969	8,224	16,097	10,731	9,938	8,247	25,664	13,559	11,276	10,972	33.0%
Eating and Drinking Places	78,660	51,964	60,730	64,985	69,880	52,543	61,840	71,370	79,385	51,957	71,914	68,572	-3.9%
Miscellaneous Retail	47,933	19,580	18,847	18,626	44,805	20,103	21,106	19,572	46,527	24,528	22,519	19,450	-0.6%
Finance, Insurance and Real Estate	65,421	36,891	47,919	37,536	68,978	41,315	41,873	37,160	66,202	40,578	48,305	34,449	-7.3%
Depository Insititutions	13,499	4,060	10,336	3,391	18,021	4,216	5,218	3,463	9,893	6,305	6,552	4,449	28.5%
Real Estate	19,304	12,042	14,132	13,414	17,961	11,307	14,553	11,345	16,250	10,850	15,861	13,817	21.8%
Services	417,447	312,888	307,934	298,528	450,253	314,791	353,769	358,595	481,356	383,912	409,661	362,123	1.0%
Business Services	166,580	75,336	86,047	86,159	174,926	82,795	116,278	136,296	224,454	141,821	149,616	125,806	-7.7%
Health Services	57,033	44,311	42,402	39,703	55,054	43,658	42,936	38,459	55,430	32,569	45,790	41,402	7.7%
Social Services	15,036	15,260	17,395	17,474	19,333	15,096	18,887	15,479	14,678	14,226	19,601	16,770	8.3%
Private Households	19,376	23,696	26,695	14,516	27,398	20,545	18,855	21,934	23,165	21,634	23,938	22,000	0.3%
Nonclassified	7,023	5,062	7,379	9,688	11,975	7,960	12,626	11,836	15,223	9,992	11,768	8,221	-30.5%
Total, Private	1,240,021	763,391	897,394	1,015,379	1,251,927	790,553	929,665	1,054,982	1,316,311	935,978	1,081,569	1,109,574	5.2%